

Please type a plus sign (+) inside this box → ☐

PTO/SB/08A (08-00)

Approved for use through 10/31/2002. OMB 0651-0031  
U.S. Patent and Trademark Office: U.S. DEPARTMENT OF COMMERCE

Under the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it contains a valid OMB control number

Substitute for form 1449A/PTO		<b>Compl te if Known</b>	
<b>INFORMATION DISCLOSURE STATEMENT BY APPLICANT</b>  (use as many sheets as necessary)		Application Number	Not Yet Assigned
		Filing Date	Not Yet Assigned
		First Named Inventor	Shizuo AKIRA et al.
		Group Art Unit	Not Yet Assigned
		Examiner Name	Not Yet Assigned
Sheet 1 of 4	Attorney Docket Number	31671-173143	

OTHER PRIOR ART -- NON PATENT LITERATURE DOCUMENTS			
Examiner Initials *	Cite No. <sup>1</sup>	Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s), publisher, city and/or country where published.	T <sup>2</sup>
CA	AA	TAKEUCHI, Osamu et al., DIFFERENTIAL ROLES OF TLR2 AND TLR4 IN RECOGNITION OF GRAM-NEGATIVE AND GRAM-POSITIVE BACTERIAL CELL WALL COMPONENTS, Immunity, Vol. 11, 443-451, October, 1999 by Cell Press, JAPAN	
	AB	HASHIMOTO, Carl et al., THE TOLL GENE OF DROSOPHILA, REQUIRED FOR DORSAL-VENTRAL EMBRYONIC POLARITY, APPEARS TO ENCODE A TRANSMEMBRANE PROTEIN, Cell, Vol. 52, 269-279, January 29, 1988 by Cell Press, Dept. of Molecular Biology, University of California, Berkeley, California	
	AC	BELVIN, Marcia P. et al., A CONSERVED SIGNALING PATHWAY: THE DROSOPHILA TOLL-DORSAL PATHWAY, Annu. Rev. Cell Div. Biol. 1996. 12:393-416, 1996 by Annual Reviews Inc., Genetic Division, Dept. of Molecular and Cell Biology, University of California, Berkeley, California	
	AD	ADACHI, Osamu et al., TARGETED DISRUPTION OF THE MYD88 GENE RESULTS IN LOSS OF IL-1-AND IL-18-MEDIATED FUNCTION, Immunity, Vol. 9, 143-150, July 1998 by Cell Press, Core Research for Evolutional Science and Technology Japan Science and Technology Corporation	
	AE	LEMAITRE, Bruno et al., THE DORSOVENTRAL REGULATORY GENE CASSETTE SPATZLE/TOLL/CACTUS CONTROLS THE POTENT ANTIFUNGAL RESPONSE IN DROSOPHILA ADULTS, Cell, Vol. 86, 973-983, September 20, 1996 by Cell Press, Institute de Biologie Moleculaire et Cellulaire, FRANCE	
	AF	HATFIELD, Craig Bond et al., SCIENTIFIC CORRESPONDENCE, Nature, Vol. 351, 355-356, May 30, 1991	
	AG	O'NEILL, Luke A. et al., SIGNAL TRANSDUCTION PATHWAYS ACTIVATED BY THE IL-1 RECEPTOR FAMILY: ANCIENT SIGNALING MACHINERY IN MAMMALS, INSECTS, AND PLANTS, Journal of Leukocyte Biology, Volume 63, June 1998, Dept. of Biochemistry and the National Pharmaceutical Biotechnology Center, Trinity College, Dublin, Ireland	
	AH	LEMAITRE, Bruno et al., DROSOPHILA HOST DEFENSE: DIFFERENTIAL INDUCTION OF ANTIMICROBIAL PEPTIDE GENES AFTER INFECTION BY VARIOUS CLASSES OF MICROORGANISMS, Proc. Natl. Acad. Sci. USA, Vol. 94, pp. 14614-14619, December, 1997, Immunology	
	AI	WILLIAMS, Michael J. et al., THE 18-WHEELER MUTATION REVEALS COMPLEX ANTIBACTERIAL GENE REGULATION IN DROSOPHILA HOST DEFENSE, The EMBO Journal, Vol. 16 No. 20, pp. 6120-6130, 1997, Dept. of Biological Sciences, University of Notre Dame, Notre Dame IN	
	AJ	KOPP, Elizabeth B. et al., THE TOLL-RECEPTOR FAMILY AND CONTROL OF INNATE IMMUNITY, Current Opinion in Immunology 11, 13-18, 1999, Section of Immunobiology, Yale University, School of Medicine, New Haven, CT	
	AK	MEDZHITOV, Ruslan et al., A HUMAN HOMOLOGUE OF THE DROSOPHILA TOLL PROTEIN SIGNALS ACTIVATION OF ADAPTIVE IMMUNITY, Letters to Nature, 388, pp. 394-397, 1997, Section of Immunobiology, Yale University School of Medicine and Howard Hughes Medical Institute, New Haven Connecticut	

Examiner Signature		Date Considered	11/8/03
--------------------	--	-----------------	---------

\*EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

<sup>1</sup> Unique citation designation number. <sup>2</sup> Applicant is to place a check mark here if English language Translation is attached.

SEND TO: Assistant Commissioner for Patents, Washington, DC 20231.

**VENABLE**  
ATTORNEYS AT LAW

Please type a plus sign (+) inside this box → ☐

PTO/SB/08A (08-00)

Approved for use through 10/31/2002. OMB 0651-0031  
U.S. Patent and Trademark Office: U.S. DEPARTMENT OF COMMERCE

Under the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it contains a valid OMB control number

Substitute for form 1449A/PTO

**INFORMATION DISCLOSURE  
STATEMENT BY APPLICANT**

(use as many sheets as necessary)

Sheet 2 of 4

**Complete if Known**

Application Number	Not Yet Assigned
Filing Date	Not Yet Assigned
First Named Inventor	Shizuo AKIRA et al.
Group Art Unit	Not Yet Assigned
Examiner Name	Not Yet Assigned
Attorney Docket Number	31671-173143

**OTHER PRIOR ART -- NON PATENT LITERATURE DOCUMENTS**

Examiner Initials *	Cite No. <sup>1</sup>	Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s), publisher, city and/or country where published.	T <sup>2</sup>
CE	AL	ROCK, Fernando L. et al., A FAMILY OF HUMAN RECEPTORS STRUCTURALLY RELATED TO DROSOPHILA TOLL, Proc. Natl. Acad. Sci. USA, Vol. 95, pp. 588-593, January 1998, Developmental Biology, Protein Machine Group, Dept. of Molecular Biology, DNAX Research Institute, Palo Alto, CA	
	AM	CHAUDHARY, Preet M. et al., CLONING AND CHARACTERIZATION OF TWO TOLL/INTERLEUKIN-1 RECEPTOR-LIKE GENES TIL3 AND TIL-4: EVIDENCE FOR A MULTI-GENE RECEPTOR FAMILY IN HUMANS, Blood, Vol. 91, No. 11 (June 1), 1998: pp. 4020-4027, Dept. of Medicine and Molecular Biotechnology, University of Washington, Seattle, WA	
	AN	TAKEUCHI, O. et al., TLR6: A NOVEL MEMBER OF AN EXPANDING TOLL-LIKE RECEPTOR FAMILY, Gene 231, 59-65, 1999, Department of Biochemistry, Hyogo College of Medicine, 1-1 Mukogawa-cho, Hishinomiya, Hyogo 663-8501 JAPAN	
	AO	MUZIO, Marta, et al., THE HUMAN TOLL SIGNALING PATHWAY: DIVERGENCE OF NUCLEAR FACTOR KB AND JNK/SAPK ACTIVATION UPSTREAM OF TUMOR NECROSIS FACTOR RECEPTOR-ASSOCIATED FACTOR 6 (TRAF6), Department of Immunology and Cell Biology, Mario Negri Institute 1-20157 Milau, ITALY	
	AP	MEDZHITOV, Ruslan, et al. MYD88 IS AN ADAPTOR PROTEIN IN THE Htoll/il-1 RECEPTOR FAMILY SIGNALING PATHWAYS, Molecular Cell, Vol. 2, 253-258, August, 1998, by Cell Press, Section of Immunobiology and Howard Hughes Medical Institute, Yale University School of Medicine, New Haven Connecticut	
	AQ	KAWAI, Taro, et al., UNRESPONSIVENESS OF MYD88-DEFICIENT MICE TO ENDOTOXIN, Immunity, Vol. 11, 115-122, July 1999, by Cell Press, Department of Biochemistry, Hyogo College of Medicine, JAPAN	
	AR	HOSHINO, Katsuaki et al., CUTTING EDGE: TOLL-LIKE RECEPTOR 4 (TLR4)-DEFICIENT MICE ARE HYPORESPONSIVE TO LIPOPOLYSACCHARIDE: EVIDENCE FOR TLR4 AS THE LPS GENE PRODUCT, The American Association of Immunologists, 3749-3752, Department of Biochemistry, Hyogo College of Medicine, Hyogo, JAPAN	
	AS	HEINE, Holger et al., CUTTING EDGE: CELLS THAT CARRY A NULL ALLELE FOR TOLL-LIKE RECEPTOR 2 ARE CAPABLE OF RESPONDING TO ENDOTOXIN, The American Association of Immunologists, 6971-6975, 1999, Maxwell Finland Laboratory for Infectious Diseases, Boston University School of Medicine and Boston Medical Center, Boston, MA	
	AT	CHOW, Jesse C., et al., TOLL-LIKE RECEPTOR-4 MEDIATES LIPOPOLYSACCHARIDE-INDUCED SIGNAL TRANSDUCTION, The Journal of Biological Chemistry, Vol. 274, No. 16, Issue of April 16 pp. 10689-10692, 1999, Division of Inflammatory Diseases and Synthetic Chemistry, Boston, MA	
	AU	MEDZHITOV, Ruslan, et al., INNATE IMMUNITY: THE VIRTUES OF A NONCLONAL SYSTEM OF RECOGNITION, Cell, Vol. 91, 295-298, October 31, 1997, by Cell Press, Section of Immunobiology, Yale University School of Medicine and Howard Hughes Medical Institute, New Haven, Connecticut	
	AV	MORRISON, David C. et al., BACTERIAL ENDOTOXINS AND HOST IMMUNE RESPONSES, Advances in Immunology, Vol. 28, 293-450, 1979, Dept. of Immunopathology, Scripps Clinic Research Foundation, La Jolla, California, West Haven, Connecticut	

Examiner  
SignatureDate  
Considered

1/8/03

\* EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

<sup>1</sup> Unique citation designation number. <sup>2</sup> Applicant is to place a check mark here if English language Translation is attached.

SEND TO: Assistant Commissioner for Patents, Washington, DC 20231.

**VENABLE**  
ATTORNEYS AT LAW

Please type a plus sign (+) inside this box → ☐

PTO/SB/08A (08-00)

Approved for use through 10/31/2002. OMB 0651-0031  
U.S. Patent and Trademark Office: U.S. DEPARTMENT OF COMMERCE

Under the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it contains a valid OMB control number

Substitute for form 1449A/PTO

**INFORMATION DISCLOSURE  
STATEMENT BY APPLICANT**

(use as many sheets as necessary)

Sheet 3 of 4

**Complete if Known**

Application Number	Not Yet Assigned
Filing Date	Not Yet Assigned
First Named Inventor	Shizuo AKIRA et al.
Group Art Unit	Not Yet Assigned
Examiner Name	Not Yet Assigned
Attorney Docket Number	31671-173143

**OTHER PRIOR ART -- NON PATENT LITERATURE DOCUMENTS**

Examiner Initials *	Cite No. <sup>1</sup>	Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s), publisher, city and/or country where published.	T <sup>2</sup>
ca	AW	ULEVITCH, RJ et al., RECEPTOR-DEPENDENT MECHANISMS OF CELL STIMULATION BY BACTERIAL ENDOTOXIN, Annu. Rev. Immunol. 1995. 13:434-457, 1995, by Annual Reviews, Inc., Department of Immunology, The Scripps Research Institute, La Jolla California 92037	
	AX	WRIGHT, Sameul D. et al., CD 14, A RECEPTOR FOR COMPLEXES OF LIPOPOLYSACCHARIDE (LPS) AND LPS BINDING PROTEIN, Science, Vol. 249, pp. 1431-1433, 1990, Laboratory of Cellular Physiology and Immunology, The Rockefeller University, New York NY	
	AY	KIRSCHNING, Carsten J. et al., HUMAN TOLL-LIKE RECEPTOR 2 CONFERS RESPONSIVENESS TO BACTERIAL LIPOPOLYSACCHARIDE, J. Exp. Med., The Rockefeller University Press, Vol. 188, No. 11, pp. 2091-2097, Tularik, inc., South San Francisco, CA	
	AZ	YANG, Ruey-Bing et al., TOLL-LIKE RECEPTOR-2 MEDIATES LIPOPOLYSACCHARIDE-INDUCED CELLULAR SIGNALLING, Nature, Vol. 395, 284-288, September 1998	
	BA	YANG, Ruey-Bing et al., SIGNALING EVENTS INDUCED BY LIPOPOLYSACCHARIDE-ACTIVATED TOLL-LIKE RECEPTOR 2, The American Association of Immunologists, Vol. 163, 639-643, 1999, Department of Molecular Biology, Genentech, Inc., San Francisco, CA	
	BB	POLTORAK, Alexander et al., DEFECTIVE LPS SIGNALING IN C3H/HEJ AND C 57BL/10ScCr MICE: MUTATIONS IN Tlr4 GENE, Science, Vol. 282, p. 2085-2088, J.T. Nguyen, F. E. Cohen, W.A. Lim, Dep. of Cellular and Molecular Pharmacology, San Francisco, CA	
	BC	QURESHI, Salman T. et al., ENDOTOXIN-TOLERANT MICE HAVE MUTATIONS IN TOLL-LIKE RECEPTOR 4 (Tlr4), J. Exp. Med., The Rockefeller University Press, Vol. 189, No. 4, pp. 615-625, Dept. of Medicine, Millennium Pharmaceuticals, Inc., Cambridge, MA	
	BD	SCHWANDER, Ralf et al., PEPTIDOGLYCAN-AND LIPOTEICHOIC ACID-INDUCED CELL ACTIVATION IS MEDIATED BY TOLL-LIKE RECEPTOR 2, The Journal of Biological Chemistry, Vol. 274, No. 25, June 18, 1999, pp. 17406-17409, Institute fuer Med. Mikrobiologie, Immunologie und Hygiene, Muenchen, GERMANY	
	BE	YOSHIMURA, Atsutoshi, et al., CUTTING EDGE: RECOGNITION OF GRAM-POSITIVE BACTERIAL CELL WALL COMPONENTS BY THE INNATE IMMUNE SYSTEM OCCURS VIA TOLL-LIKE RECEPTOR, The American Association of Immunologists, Maxwell Finall Laboratory for Infectious, Boston University School of Medicine, Boston, MA	
	BF	MUHLRADT, Peter F. ISOLATION, STRUCTURE ELUCIDATION, AND SYNTHESIS OF A MACROPHAGE STIMULATORY LIPOPEPTIDE FROM MYCOPLASMA FERMENTANS ACTING AT PICOMOLAR CONCENTRATION, J. Exp. Med., The Rockefeller University Press, Vol. 185, No. 11, June 2, 1997, 1951-1958, Immunobiology and Structure Research Groups, Gesellschaft fur Biotechnologische Forschung GmbH, Tubngen, GERMANY	
✓	BG	ALIPRANTIS, Antonios O. et al., CELL ACTIVATION AND APOPTOSIS BY BACTERIAL LIPOPROTEINS THROUGH TOLL-LIKE RECEPTOR-2, Science, Vol. 285, 736-739, July 30, 1999, Skirball Institute and Department of Microgiology, New Yor University School of Medicine, New York, NY	

Examiner Signature		Date Considered	11/8/03
--------------------	--	-----------------	---------

\*EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

<sup>1</sup> Unique citation designation number. <sup>2</sup> Applicant is to place a check mark here if English language Translation is attached.

SEND TO: Assistant Commissioner for Patents, Washington, DC 20231.

**VENABLE**  
ATTORNEYS AT LAW

Please type a plus sign (+) inside this box → +

PTO/SB/08A (08-00)

Approved for use through 10/31/2002. OMB 0651-0031

U.S. Patent and Trademark Office: U.S. DEPARTMENT OF COMMERCE

Under the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it contains a valid OMB control number

Substitute for form 1449A/PTO  <b>INFORMATION DISCLOSURE STATEMENT BY APPLICANT</b>  <i>(use as many sheets as necessary)</i>		Complete if Known	
		Application Number	Not Yet Assigned
		Filing Date	Not Yet Assigned
		First Named Inventor	Shizuo AKIRA et al.
		Group Art Unit	Not Yet Assigned
		Examiner Name	Not Yet Assigned
		Attorney Docket Number	31671-137143
Sheet	4	of	4

OTHER PRIOR ART -- NON PATENT LITERATURE DOCUMENTS			
Examiner Initials *	Cite No. <sup>1</sup>	Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s), publisher, city and/or country where published.	T <sup>2</sup>
ca	BH	BRIGHTBILL, Hans D., HOST DEFENSE MECHANISMS TRIGGERED BY MICROBIAL LIPOPROTEINS THROUGH TOLL-LIKE RECEPTORS, Science, July 30, 1999, 732-736, Vol. 285, Department of Microbiology and Immunology, University of California Los Angeles School of Medicine, Los Angeles, CA 90095	
	BI	DENLINGER, Loren C., NUCEAR TRANSLOCATION OF NF-Kb IN LIPOPOLYSACCHARIDE-TREATED MACROPHAGES FAILS TO CORRESPOND TO ENDOTOXICITY, EVIDENCE SUGGESTING A REQUIREMENT FOR A GAMMA INTERFERON-LIKE SIGNAL, Infection and Immunity, Apr. 1998, 1638-1647, vol. 66, No. 4, Departments of Medical Microbiology and Immunology, Biomolecular Chemistry, Pharmacology, and Medicine, 1300 University Ave., Room 407 SMI, Madison, WI 53706	
	BJ	HARDIMAN, Gary, GENETIC STRUCTURE AND CHROMOSOMAL MAPPING OF MYD88, GENOMICS, 1997, 332-339, ARTICLE NO. GE974940, Department of Molecular Biology, DNAX Research Institute, Palo Alto California 94304-1104	
	BK	KIRSCHNING, Carsten J., HUMAN TOLL-LIKE RECEPTOR 2 CONFERS RESPONSIVENESS TO BACTERIAL LIPOPOLYSACCHARIDE, Dec. 7, 1998, 2091-2097, vol. 188 no. 11, Tularik, Inc., South San Francisco, California 94080	
	BL	GERARD, Craig, FOR WHOM THE BELL TOLLS, NEWS AND VIEWS, SEPTEMBER 17, 1998, 217, 219, vol. 396	
	BM	Michalek, Suzanne M. THE PRIMARY ROLE OF LYMPHORETICULAR CELLS IN THE MEDIATION OF HOST RESPONSES TO BACTERIAL ENDOTOXIM, THE JOURNAL OF INFECTIOUS DISEASES, JANUARY 1980, 55-63, vol. 141, no. 1, The University of Chicago	
	BN	HARBOUR, Deborah V. SPLENIC LYMPHOCYTE PRODUCTION OF AN ENDORPHIN DURING ENDOTOXIC SHOCK, BRAIN, BEHAVIOR, AND IMMUNITY, 1987, 123-133, University of Alabama at Birmingham, Birmingham, Alabama 35294	

Examiner Signature		Date Considered	11/8/03
--------------------	--	-----------------	---------

\*EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

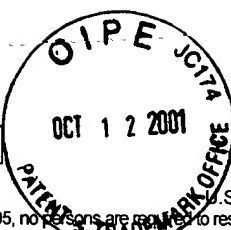
<sup>1</sup> Unique citation designation number. <sup>2</sup> Applicant is to place a check mark here if English language Translation is attached.

SEND TO: Assistant Commissioner for Patents, Washington, DC 20231.

**VENABLE**  
ATTORNEYS AT LAW

Please type a plus sign (+) inside this box →

+



PTO/SB/08A (08-00)

Approved for use through 10/31/2002. OMB 0651-0031

U.S. Patent and Trademark Office: U.S. DEPARTMENT OF COMMERCE

Under the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it contains a valid OMB control number

Substitute for form 1449A/PTO

# **INFORMATION DISCLOSURE STATEMENT BY APPLICANT**

(use as many sheets as necessary)

Sheet

1

of

1

## **Complete if Known**

Application Number	09/889,324
Filing Date	July 13, 2001
First Named Inventor	Shizuo AKIRA et al.
Group Art Unit	1641
Examiner Name	Unassigned
Attorney Docket Number	31671-173143

RECEIVED

OCT 17 2001

TECH CENTER 1600/2900

## **OTHER PRIOR ART -- NON PATENT LITERATURE DOCUMENTS**

Examiner Initials *	Cite No. <sup>1</sup>	Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s), publisher, city and/or country where published.	T <sup>2</sup>
CQ	A1	OGAWA, "Chemical Structure of Lipid A From Porphyromonas (Bacteroides) gingivalis Lipopolysaccharide", FEBS 13114, Federation of European Biochemical Societies, Vol. 332(1,2):197-201, (1993)	
	A2	TANAMOTO et al., "The Lipid A Moiety Of Porphyromonas Gingivalis Lipopolysaccharide Specifically Mediates The Activation Of C3H/HeJ Mice", The Journal of Immunology, The American Association of Immunologists, Vol. 158:4430-4436, (1997)	
	A3	GUPTA et al., "Peptidoglycan Induces Transcription And Secretion Of TNF-α And Activation of Lyn, Extracellular Signal-Regulated Kinase, And Rsk Signal Transduction Proteins In Mouse Macrophages" The Journal of Immunology, The American Association of Immunologists, Vol. 155:2620-2630, (1995)	
	A4	HEUMANN et al., "Gram-Positive Cell Walls Stimulate Synthesis Of Tumor Necrosis Factor Alpha And Interleukin-6 By Human Monocytes", Infection and Immunity, American Society for Microbiology, Vol. 62(7):2715-1721, (1994)	
	A5	BARNES et al., "Cytokine Production Inducted By Mycobacterium Tuberculosis Lipoarabinomannan", The Journal of Immunology, The American Association of Immunologists, Vol. 149:541-547, (1992)	
	A6	ZHANG et al., "Mechanisms Of Stimulation Of Interleukin-1β And Tumor Necrosis Factor-α By Mycobacterium Tuberculosis Components", J. Clin. Invest., The American Society For Clinical Investigation, Inc., Vol. 91:2076-2083, (1993)	
	A7	KOTANI et al., "Immunoadjuvant Activities Of Cell Walls And Their Water-Soluble Fractions Prepared From Various Gram-Positive Bacteria", Biken Journal, Vol. 18:77-92, (1975)	
	A8	OGAWA et al., "Stimulation Of Migration Of Human Monocytes By Bacterial Cell Walls And Muramyl Peptides", Infection And Immunity, American Society For Microbiology, Vol. 38(3):817-824, (1982)	
	A9	KELLER et al., "Macrophage Response To Bacteria: Induction Of Marked Secretory And Cellular Activities By Lipoteichoic Acids", Infection And Immunology, American Society For Microbiology, Vol. 60(9):3664-3672, (1992)	
	A10	PUGIN et al., "CD14 Is A Pattern Recognition Receptor", Immunity, Vol. 1:509-516, (1994)	
	A11	GUPTA et al., "CD14 Is A Cell-Activating Receptor For Bacterial Peptidoglycan", The Journal of Biological Chemistry, Vol. 271(38):23310-23316, (1996)	
	A12	CLEVELAND et al., "Lipoteichoic Acid Preparations Of Gram-Positive Bacteria Induce Interleukin-12 Through A CD14-Dependent Pathway", Infection And Immunity, American Society For Microbiology, Vol. 64(6):1906-1912, (1996)	

Examiner  
Signature

Date

Considered

11/8/03

\*EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

<sup>1</sup> Unique citation designation number. <sup>2</sup> Applicant is to place a check mark here if English language Translation is attached.

SEND TO: Assistant Commissioner for Patents, Washington, DC 20231.

**VENABLE**  
ATTORNEYS AT LAW